Climate change in Danish impact assessment practice: The ugly duckling?

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EA in DK
How often are GHG considered in DK EAs?

The applied data sample of the study

- 762 Danish EA reports (published 2017-2021)
- 174 Reports that include GHG emission assessments
- 102 Share of reports published 2017-2019
- Share of reports published 2020-2021
Is it getting more frequent over time?

Distribution of EA reports according to year of publication
For what activities are GHG considered?

**Figure 3.** Distribution of EIA reports according to project types.

**Figure 4.** Distribution of SEA reports according to plan types.
How often is GHG emissions significant?

Figure 8. Distribution of 88 significance determinations for GHG emissions according to the determined degree of significance.
Why not significant?

EIA of a highway in 2023:

The total greenhouse gas emission from the construction of the highway and tunnel is estimated to 262.733 tons CO$_2$

“Compared to Denmark’s yearly CO$_2$ emissions, the CO$_2$ impact from the project accounts for approx. 0.2%. The CO$_2$ emissions in the construction phase are therefore considered insignificant compared to global and reginal impacts.”
Transformation process

Training

SAERSKILT MODUL

LIVSCYKLUSVURDERING (LCA) MED FOKUS PAA KLIMAAFTRYK

Guidance

VAESENTLIGHED AF KLIMAPAVIRKNINGER

Tilgange til at vurdere vaeentlighed af drivhusgasudledninger i miljovalueringer

innovationsfonden
## Approaches to significance assessment

<table>
<thead>
<tr>
<th>Assessment based on vulnerability</th>
<th>Assessment based on amounts</th>
<th>Assessment based on political targets</th>
<th>Assessment based on boundaries</th>
<th>Assessment based on benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>The climate is under pressure and very vulnerable</td>
<td>It is possible to make an absolute threshold value</td>
<td>Emissions must be in accordance with political targets</td>
<td>An area or a sector can only emit X tons</td>
<td>We constantly need to improve performance</td>
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<td>IPCC’s report, etc.</td>
<td>The Danish Energy Agency’s guidance</td>
<td>IEMA’s guidance</td>
<td>DK version of C40 framework</td>
<td>BAT/BREF documents</td>
</tr>
<tr>
<td>The climate is so vulnerable that all emissions are significant</td>
<td>A threshold at 2/10/20,000 tons CO₂ determines significance</td>
<td>If an emission is above emission reduction scenarios, then it is significant</td>
<td>An increased emission means that something else must be reduced – and thus significant</td>
<td>If an emission is higher than BAT, then it is significant</td>
</tr>
<tr>
<td>Climate change is taken seriously</td>
<td>An absolute measure is “easy” to work with</td>
<td>Compliance with political targets</td>
<td>Prioritization of emissions</td>
<td>A point of departure for improving plans and projects</td>
</tr>
<tr>
<td>If everything is significant, we dilute the concept</td>
<td>Is 1 (or few) thresholds applicable to any activity?</td>
<td>How to determine the allowed emission of an activity based on targets?</td>
<td>How to determine boundaries</td>
<td>An improvement may not be ‘enough’</td>
</tr>
</tbody>
</table>

### Assess based on...

- **Point of departure**
- **Relevant documents**
- **Logic**
- **Strengths of the approach**
- **Weaknesses of the approach**
References


Overshoot Day in Denmark 2024: Our natural resources have been depleted, https://insidesystems.com/blog/overshoot-day-in-denmark-2024/

3. Limfjordsforbindelse - Opdatering af VVM for Egholmlinjen Miljøkonsekvensrapport, https://api.vejdirektoratet.dk/sites/default/files/2021-02/Milj%C3%B8konsekvensrapport_Egholmlinjen.pdf

Take-aways and discussion

- EA have a role in GHG efforts – but do we make use of it?
- Overview of (bad) practice motivates improvements of practice
- Overview of approaches to assess significance provides very good discussions among practitioners
- Cross-country exchange of status, approaches, and experiences would be highly interesting and useful!
Let’s continue the conversation!
Post questions and comments in the IAIA24 app.

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